



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/822,440 | 03/30/2001 | Jin Lu | US010078 | 8463 |

24737 7590 09/16/2004

PHILIPS INTELLECTUAL PROPERTY & STANDARDS
P.O. BOX 3001
BRIARCLIFF MANOR, NY 10510

| |
|----------|
| EXAMINER |
|----------|

EISEN, ALEXANDER

| | |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

2674

10

DATE MAILED: 09/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/822,440

Applicant(s)

LU, JIN

Examiner

Alexander Eisen

Art Unit

2674

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 October 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 and 14-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 and 14-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 21, 22, 24, 25, 27 and 28 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claims recite limitations “the means for adjusting the first pressure threshold comprises means for selecting the first pressure threshold from a predetermined set of discrete [three discreet] pressure thresholds”. There is no support in the original specification for such limitations. The specification is merely states in page 11: “The slide switch 25 disposed in slide well 27 is used to move back and forth among pressure threshold positions 28a, 28b and 28c, respectively, as shown by arrows 29. In this way, different users can adjust the device 10 for their individual positioning (“light”) touch and also their individual activation (“heavier”) touch”. While it is understood that the “light” touch is defined by the first threshold and the “heavier” touch by the second threshold, it is not clear from the above description if there is a set of predetermined three discrete pressure thresholds identified by positions 28a, 28b and 28c.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2674

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-11, 14-20, 23, 26 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Liebenow et al., (“Liebenow”), in view of Gillespie et al., (“Gillespie”), both references are of record.

With respect to claims 1, 3 and 11 Liebenow discloses a handheld device 700 (FIGS. 15-16) for rapidly and easily inputting text comprising a display 706 for showing the input of text; and a pressure sensitive touchpad disposed under the display, wherein finger pressure on said touch pad will input textual information upon said display. Liebenow also discloses that the finger position is displayed upon the detection of finger pressure on the touchpad (FIG. 14; paragraph [0065].

Liebenow does not disclose explicitly that the handheld device further comprises means for adjusting a first pressure threshold of the touchpad, below which the display is dormant and above which finger positions on the touchpad are displayed.

However, Liebenow does imply that in order to prevent inadvertent actuation of a key the device has to distinguish between the different levels of pressure, such as lower level when a finger is just positioned on the touchpad or an increasing pressure indicating user’s intention to activate a key, [0037].

Addressing a similar problem Gillespie teaches a touchpad, wherein a finger considered to be present if the finger pressure exceeds a certain threshold (col. 23; lines 40-47), which may be adjusted to suit the taste of an individual user, or otherwise to be calibrated so as to prevent inadvertent activation of a function (col. 23, line 65 - col. 25, line 44).

It would have been obvious to one of ordinary skill in the art at the time when the invention was made to implement the pressure threshold adjustment (along with adjustment means - software running calibration algorithm) taught by Gillespie in the handheld device of Liebenow, because setting the threshold as the former does will provide the latter with ability to distinguish between the states when a user simply holding the device or when a user has an intention to operate a particular key, thus to avoid inadvertent operation of a key and practically realize a touchpad, which will be immune to a noise.

As to claim 2, the device of Liebenow further comprises means for displaying finger positions on the touchpad (display 706).

As to claims 4 and 14, the touchpad comprises a keyboard adapted for placement of fingers (FIGS. 1-4, 15; paragraph [0030]).

As to claims 5 and 15, the touchpad comprises a standard keyboard configuration (such as QWERTY; [0033]).

As to claims 6 and 16, the touchpad comprises a multiplicity of finger sensitive pressure zones, [0036].

As to claims 7 and 17, the touchpad 704 is positioned behind the display 706.

As to claims 8 and 18, the display comprises an LCD screen, [0026].

As to claims 9 and 19, the display is capable of displaying text in a word processing format (FIG. 15).

As to claims 10, 20, 23, 26 and 29, while Liebenow teaches that the touchpad has to distinguish between the two levels of pressure, the one when a user touches the touchpad to display a finger position and the other when a user intends to activate a key, Gillespie teaches

Art Unit: 2674

setting the two pressure threshold levels, such as Zth (the finger considered to be present) and Ztap (the finger is considered "clicking" or typing). See also Liebenow, FIG. 14, paragraph [0070].

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexander Eisen whose telephone number is (703) 306-2988. The examiner can normally be reached on M-F (8:30-4:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard A. Hjerpe can be reached on (703) 305-4709. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2674

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "Alexander Eisen".

Alexander Eisen
Primary Examiner
Art Unit 2674

14 September 2004